

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A storage device-controlling-device system comprising:

a channel controller for receiving a data input/output request based on file-name indication from an information processing device through a network and transmitting/receiving data to/from the information processing device;

a disk controller for carrying out input/output control of data stored in a storage volume for storing the data; and

a first memory for storing the data delivered between the channel controller and the disk controller; and

a data transfer network connected to said channel controller, said disk controller and said first memory,

wherein the channel controller is equipped with a first processor for outputting a block-basis I/O request corresponding to the data input/output request and controlling the first memory, a file access processor circuit which has a second processor and a second memory controlled by the second processor and serves to control the transmission/reception of the data input/output request and the data which is carried out with sent from the information processing device, a data transfer device for controlling data transfer between the first memory and the second memory, and a third memory controlled by the first processor, which are formed on a

circuit board module, and wherein the second processor transmits information indicating the storage position of the data in the second memory to the first processor, the first processor writes into the third memory data transfer information containing information indicating the storage position of the data in the first memory and information indicating the storage position of the data in the second memory, and the data transfer device reads out the data transfer information from the third memory and controls the data transfer between the first memory and the second memory on the basis of the data transfer information thus read out.

2. (currently amended) A storage device-controlling devicesystem comprising:

a channel controller for receiving a data input/output -request based on file-name indication from an information processing device through a network and transmitting/receiving data to/from the information processing device;

a disk controller for carrying out input/output control of data stored in a storage volume for storing the data; and

a first memory for storing the data delivered between the channel controller and the disk controller; and

a data transfer network connected to said channel controller, said disk controller and said first memory.

wherein the channel controller is equipped with a first processor for outputting a block-basis I/O request corresponding to the data input/output, request and controlling the first memory, a file access processor-circuit which has a second

processor and a second memory controlled by the second processor and serves to control the transmission/reception of the data input/output request and the data which is carried out with ~~sent~~ from the information processing device, a data transfer device for controlling data transfer between the first memory and the second memory, and a third memory controlled by the first processor, which are formed on

a circuit board, and

wherein the second processor transmits information indicating the storage position of the data in the second memory to the first processor, the first processor writes into the third memory data transfer information containing information indicating the storage position of the data in the first memory and information indicating the storage position of the data in the second memory- and transmits the storage position of the data transfer information in the third memory to the data transfer device, and the data transfer device reads out the data transfer information from the third memory and controls the data transfer between the first memory and the second memory on the basis of the data transfer information thus read out.

3. (currently amended) A storage device-controlling device system comprising:

a channel controller for receiving a data input/output request based on file-name indication from an information processing device through a network and transmitting/receiving data to/from the information processing device;

a disk controller for carrying out input/output control of data stored in a storage volume for storing the data; and

a first memory for storing the data delivered between the channel controller and the disk controller; and

a data transfer network connected to said channel controller, said disk controller and said first memory,

wherein the channel controller is equipped with a first processor for outputting a block-basis I/O request corresponding to the data input/output request and controlling the first memory, a file access processor-circuit which has a second processor and a second memory controlled by the second processor and serves to control the transmission/reception of the data input/output request and the data which is carried out with the information processing device, a data transfer device for controlling data transfer between the first memory and the, second memory, and a third memory controlled by the first processor, which are formed on a circuit board,

and

wherein the first processor writes into the third memory first data transfer information containing information indicating the storage position of the data in the first memory, the second processor writes into the second memory second data transfer information containing information indicating the storage position of the data in the second memory, and the data transfer device reads out the second data transfer information from the second memory, reads out the first data transfer information from the third memory, and controls the data transfer between the first memory and the second memory based on the basis of the first data transfer information and the second data transfer information.

4. (currently amended) A storage device ~~controlling devices~~ system comprising:

a channel controller for receiving a data input/output request based on file-name indication from an information processing device through a network and transmitting/receiving data to/from the information processing device;

a disk controller for carrying out input/output control of data stored in a storage volume for storing the data; and

a first memory for storing the data delivered between the channel controller and the disk controller; and

a data transfer network connected to said channel controller, said disk controller and said first memory.

wherein the channel controller is equipped with a first processor for outputting a block-basis I/O request corresponding to the data input/output request and controlling the first memory, a file access processor circuit which has a second processor and a second memory controlled by the second processor and serves to control the transmission/reception of the data input/output request and the data which is carried out with the information processing device, a data transfer device for controlling data transfer between the first memory and the second memory, and a third memory controlled by the first processor, which are formed on a circuit board,

and

wherein the first processor writes into the third memory first data transfer information containing information indicating the storage position of the data in the first memory, the second processor writes into the second memory second data

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transfer information containing information indicating the Storage position of the data in the second memory, the second processor transmits information indicating the storage position of the second data transfer information to the first processor, the

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